

Marine Region Priorities March 2008

Primary Mandates

Through a variety of legislated and regulatory mandates, the Department of Fish and Game (Department) is expected to collect and analyze fisheries data for use in implementing management strategies for marine fisheries, while developing fishery management plans (FMPs) as the preferred mechanism for establishing those strategies. Collection of essential fisheries information (EFI) including the monitoring of harvest levels is an on-going need to meet management goals. Detailed data on fisheries and the stocks those fisheries depend upon are often unavailable or insufficient. Recreational and Commercial catch data have become even more important with declines in salmon and groundfish stocks over the last decade.

Similar to fisheries data, ecological, habitat, population dynamics, and natural processes information necessary for implementing the Marine Life Management Act (MLMA) and Marine Life Protection Act (MLPA) are often limited or completely lacking. Interactions between different species complexes and the fisheries that pursue them are poorly understood and necessary to implement both MLPA and MLMA. Without field data, uncertainties in the amount of fish caught annually can lead to premature fishery closure or, worse, unexpected and potentially significant declines in fish stocks. Additionally, the MLMA requires the Department to manage coastal fisheries in a sustainable manner and MLPA requires monitoring of marine protected area (MPA) performance, both of which require the best scientific information available.

Overall Marine Region Priorities

Complete implementation of MLPA and MLMA, along with their overarching guidelines for ongoing management, provides the basis of the Marine Region's current priorities. The priorities are included within five areas of focus:

1. Federal and State fisheries management
2. Providing data, analyses, and recommendations for management and policy decisions
3. Continuing ongoing and long-term sampling programs
4. Increasing fisheries dependent sampling of State managed species
5. Increasing fisheries independent data collection where it is pertinent to management

Other Priorities

In addition to the overall priorities above and the more detailed priorities for management below, the Department and Marine Region have other important priorities. These priorities primarily surround the area of outreach and communication. In order for management activities to be effective, the public must understand not only the regulatory measures in place, but also the rationale and importance of those measures. Outreach priorities include simple and widely distributed informational brochures, adequate and consistent coastal signage, and direct outreach to public groups at meetings, shows, and other events. Similar to the priority of outreach is our priority of enforcing of laws and regulations. In many cases, our enforcement staff are providing the primary outreach vehicle in terms of direct public contact. While the core priority of enforcement staff is to uphold the law and ensure public safety, they spend considerable time educating the public and providing information.

Priorities for Fisheries Management Plans

The Marine Region's primary focus with regards to FMPs and consistent with implementing MLMA is to collect the data necessary to prepare adequate FMPs for the species most in need of additional management and to focus resources on fully implementing and revising existing FMPs. Collection of fisheries data often links directly to monitoring activities required by the MLPA. Implementation cannot begin before these basic data are collected and the FMPs themselves drafted or brought up to date.

The Commission adopted MLMA master plan for the preparation of FMPs includes a ranked list of species of importance for future FMPs. The Marine Region has reviewed that list in light of new information, changing stock status, and other management concerns. The following is a revision to the MLMA master plan list, though it has not significantly changed from the original list. It is comprised of separate lists for fishes and invertebrates, with priority rankings for each:

a) Fishes

1. **California Halibut** - California halibut is one of the most important state-managed finfish species, both recreationally and commercially.
2. **Surfperches** - Barred surfperch is the most important species for recreational beach anglers in central and southern California.
3. **Barred and Spotted Sand Bass and Kelp Bass** - Kelp bass and barred sand bass continue to be two of the most important finfish species caught by recreational boat anglers in southern California.
4. **Nearshore Sharks and Rays** - While biological concern is warranted for nearshore sharks and rays, directed fishery effort and resultant catch have decreased somewhat in recent years.

b) Invertebrates

1. **Spiny Lobster** - Little is known about the extent of the recreational lobster fishery, though it has been increasing recently. The commercial fishery continues to be one of the most lucrative in the State.

2. **Subtidal Snails** (including Kellet's Whelk and Wavy Top Snail) - Fishing pressure and interest in these species has grown in recent years.
3. **Bivalve Clams** (Gaper, Geoduck, Pismo, Razor) - Little is known about current stock status, while fishing pressure has remained relatively high.
4. **Rock Scallop and Mussels** - These long-lived, sedentary species are particularly vulnerable to over harvest.
5. **Sea Urchins** (Red and Purple) - fishery-dependent and fishery-independent data have indicated dramatic declines in catches and reductions of harvestable stocks of red urchins since the fishery peak. Little is known about purple urchin stock status.
6. **Giant Keyhole Limpet** - Increasing interest in this species as a potential biomedical research and pharmaceutical species has raised concerns.
7. **Intertidal Invertebrates** (*Tegula spp.* and *Lotia gigantea*) - These species are subject to both direct harvest and indirect impacts of tidepool visitation.
8. **Sea Cucumbers** - Little is known about the status of this stock while a commercial fishery has continued over time.

Using these priorities the Marine Region recommends the following species as the most important for the preparation of the next new FMPs:

- California Halibut - There are adequate data for a stock assessment; data on catch history exist for both commercial and recreational sectors; it is the most important (volume and value) state managed finfish species where management authority is not shared with federal government; we are undergoing implementation of the trawl bill (SB 1459), which has a close link to preparation of an FMP. FMP preparation cannot precede the decision on halibut trawl grounds by April 2008.
- San Miguel Island Red Abalone - While abalone did not rise to the top of the invertebrate priority list, this was primarily because an Abalone Recovery and Management Plan (ARMP) exists. However, in adopting the ARMP, the Commission directed the Department to consider a potential fishery at San Miguel Island. In order to affect this, the Department along with a constituent advisory group will prepare the components necessary to write an FMP if a fishery is approved by the Commission. Approval process for the fishery may begin as soon as late 2008.

Other species on the priority lists are data poor when compared to the recommended species. Landings histories are either imprecise or - as in the case of spiny lobster recreational take – virtually non-existent. Management in data poor situations leads to two potential problems. It is possible that due to precautionary requirements in data poor situations that management of these species could be unnecessarily draconian. On the other hand, it is equally possible that management is too lenient and unrecognized errors could be made that result in inadvertent overharvest.

A variety of research questions that will assist the Department in completing FMPs and conducting other management activities are listed below. Cooperative and/or collaborative research can help the Department expand our limited resources and benefit overall data collection efforts. The overall success of collaborative and

cooperative research, however, depends in part upon the Department's ability to truly coordinate with outside parties and ensure the procedures and goals of projects meet Department needs. Projects where the Marine Region feels real opportunities for collaborative work are *italicized* below.

Prioritized Research Questions/Topics

Rank 1

- Determine species composition and magnitude of discarded catch in recreational fisheries
- What are the preferences, desirability (given other options), substitutes, and values by key user groups for important target species?
- *Collect EFI for spiny lobster* (possible collaborative research)
- Determine discard mortality for key groundfish species taken in recreational fisheries
- Determine catch and effort in recreational highly migratory species fisheries
- *Collect EFI for CA halibut in central and southern California* (possible collaborative research)

Rank 2

- Assess spiny lobster stock and determine Total Allowable Catch (TAC) for recreational and commercial fisheries
- Assess California halibut stock and determine TAC for recreational and commercial fisheries
- *Identify and test methods for estimating effort and catch-per-unit-effort for those segments of the recreational fishery that California Recreational Fishery Survey (CRFS) is not sampling in the field – all species.* (possible collaborative research)
- Determine if current CRFS procedures for estimating total recreational harvest in California are adequate for species taken primarily by shore modes?
- How can MPAs and single species “conservation” areas be effectively incorporated into the management (e.g guidelines for determining harvest) of state- and federally-managed species such as those covered under the Nearshore FMP?
- Determine utility of Vessel Management System data for determining catch location in Salmon fishery

Rank 3

- Which assessment model is best for evaluating the status of market squid and what types of data collection activities would best support this model?
- *Are there key differences in life history characteristics between the two species of blue rockfish?* (possible collaborative studies)
- *Collect EFI for surfperches* (possible collaborative studies)
- *Using the same methodologies as currently applied in studies at the Channel Islands and off the central coast, what is the density of key rockfish species (e.g. nearshore rockfish, vermilion, canary) at multiple sites and depths along the northern California coast (north of Point Arena)?* (possible collaborative study)
- *What are the effects of fishing gear on market squid egg beds?* (possible collaborative study)

Rank 4

- *Collect information on the population distribution and abundance patterns for surfperches in the Southern California Bight* (possible collaborative study)

- Calculate catch-per-unit-effort (CPUE) or abundance indices for deepwater species assemblages (all habitats).
- Can microchemistry of market squid statoliths be used to determine stock structure in market squid?
- Are the Pacific herring schools that spawn in San Francisco Bay genetically distinct from fish that spawn in Tomales or Humboldt Bays?
- Determine effectiveness and cost/benefit of using an ocean survey for age 3 Klamath Fall Chinook to improve ocean abundance forecasting.